



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,264	05/17/2005	Kenichi Suzuki	000023-065	3874
21839 7590 01/16/2009 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404				
EXAMINER				
CHIRISS, JENNIFER A				
ART UNIT		PAPER NUMBER		
1794				
NOTIFICATION DATE		DELIVERY MODE		
01/16/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

# Office Action Summary

## Application No.

10/535,264

## Applicant(s)

SUZUKI ET AL.

## Examiner

JENNIFER A. CHRISS

## Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. The Applicant's Amendments and Accompanying Remarks, filed November 3, 2008, have been entered and have been carefully considered. Claim 1 is amended, claims 2 – 3 and 8 – 15 are cancelled and claims 1, 4 – 7 are pending. In view of Applicant's argument that Takaoka et al. does not teach a spunbonded fabric as the fibers of Takaoka et al. are cut to a desired length, the Examiner withdraws all previously set forth rejections. As the Examiner finds Applicant's arguments persuasive, the evidence provided in the Declaration under 37 CFR 1.132 is not necessary to overcome the rejection. However, after an updated search, additional art has been found which renders the invention as currently claimed unpatentable for reasons herein below.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 103***

3. Claims 1 and 4 - 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forbes et al. (US 2004/0038612).

Forbes et al. is directed to a multi-component fiber and nonwoven webs made therefrom (Title) suitable for a variety of products such as towels, industrial wipes and disposable personal care applications (page 1, [0001]).

Forbes et al. teaches a spunbonded nonwoven comprising sheath-core

filaments, where the sheath polymer comprises a copolymer of a polypropylene polymer and the core comprises a polypropylene polymer (page 1, [0006]). The Examiner submits that the sheath and core components of Forbes et al. encompass Applicant's "at least two olefin-based polymers being of the same kind" as defined on page 9 of the Specification. Forbes et al. teach that the sheath polymer has a melt flow rate of 30 - 40 g/10 minutes and a melting temperature of from about 110 - 150 degrees C and the core polymer has a melting point of at least 8 degrees C greater than the sheath and a similar melt flow rate range (page 1, [0010]). The sheath polymer is present in an amount ranging from about 20 to about 70% by weight (page 1, [0007]). Forbes et al. teach the use of the spun-bond nonwoven laminated to other nonwovens to create a composite and uses such as a diaper (page 4, [0045 - 0046]). Forbes et al. teach that the filaments can be optionally drawn through a fiber draw unit (page 3, [0043]) and note when the fiber draw unit is used, the filaments are slightly crimped (page 4, [0043]). The Examiner notes that, if the fiber draw unit is not used the filaments would not be crimped meeting Applicant's claim limitation.

Forbes et al. teach that the composite fiber has a sheath/core weight ratio of **about** 20/80 to **about** 70/30. Forbes et al. fail to teach that the core (area of earliest induction period of strain-induced crystallization) is contained in an amount of 1 to 20% by weight of the fiber. The Examiner submits that the claimed ranges overlap since Forbes indicates that core comprises **about** 20% by weight of the fiber. In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a

prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

Similarly, a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). In the present invention, one would have been motivated to optimize the core weight percent motivated by the desire to create a non-woven fabric having the desired thermal adhesion balanced with heat shrinkage properties.

Forbes et al teach the claimed invention but fail to teach that the two olefin-based polymers have a difference between induction periods of strain-induced crystallization as measured at the same temperature and the same shear strain rate, of 100 second or longer as required by claim 1 and fail to teach the extensibility at a maximum load of not less than 70% in the MD and/or CD direction as required by claim 4. It is reasonable to presume that the difference between induction periods and extensibility is inherent to Forbes et al. Support for said presumption is found in the use of like materials (i.e. a spunbonded fabric comprising concentric sheath-core composite fibers where sheath has a lower melting temperature than the core and the fibers have substantially no crimps. In particular, see Examples 2 - 4, 6 - 7, 9 - 11 and 14 - 19 which disclose composite fibers having core and sheath resins which are similar in melt temperature and composition as discussed by Forbes et al.) which would result in the claimed

properties. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed properties would obviously have been present once the Forbes et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977). Reliance upon inherency is not improper even though the rejection is based on Section 103 instead of 102. *In re Skoner*, et al. (CCPA) 186 USPQ 80.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1 and 4 - 7 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER A. CHRISS whose telephone number is (571)272-7783. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 6 p.m., first Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. A. C./  
Examiner, Art Unit 1794

/Jennifer A Chriss/  
Examiner, Art Unit 1794